



## VenomAire Powered Air Intake Typical Installation Instructions for Jeep JL, JT 3.6L Engine - 2019 to 2021

Thank you for choosing VenomAire! Carefully read and follow these instructions for your safety and a successful install.

### Warnings

- Only a qualified Service Technician or those under the supervision of a Technician should install the VenomAire Powered Air Intake (VPAI).
- Keep all work areas clean and ensure that no debris enter the VPAI or vehicle's air intake system.
- This kit is specifically designed for use with the Factory Air Box.
- Your kit may appear different or have other modifications specific to your vehicle.
- Any loose connection may cause a check-engine light and/or force the vehicle into limp mode and damage the VPAI.
- The VPAI is not CARB approved. Check with your local laws for installation.
- The included Posi-Tap must be used for the TPS tap.
- Keep body extremities and any loose objects away from the intake of the VPAI. Wear safety glasses always while servicing. The VPAI runs at high speed and may suck any loose object into the fan blades causing severe damage possibly resulting in injury or death.
- Do not spray any liquid or chemical detergents directly on or in the electronics, wiring, or VPAI housing. Moisture may cause erratic operation and shorten service life.
- Do not operate the VPAI if any of the fan blades are chipped or missing. Any unbalanced system or vibration could cause severe damage possibly resulting in injury or death.
- Do not point the VPAI at anyone/anything or view inside while operating; doing so may cause severe damage possibly resulting in injury or death.

## VenomAire Powered Air Intake Kit Contents



Description	Part Number
VenomAire Dual Turbo Fan Housing	FNHSGTB270MMRH
Control Pack	CB12V6Ft_B
Motor Wire Cable	MWC6WR2MTR
LED Cable and Housing	LEDHSGCBL_B
Control Pack Mounting Bracket	BKJT
3.5 x 3.0-inch 90° intake elbow with IAT Grommet	BRE000956
3.5 x 4 long Coupler PCV BB12	SIL000424
DB9RS121	Black Box
CLA001045	OBDI Cable
CLA001047	(1) 3.25-inch Hose Clamps
	(3) 3.75-inch Hose Clamps
<b>Small Parts Pkg.</b>	
Add-a-Fuse tap	AE-011-2
(2) Each, ¼ inch nuts, washer, and bolts	
(2) large, (2) small VenomAire Stickers	
Variety of Zip ties	

## Installing the VenomAire Turbo Fan Intake

This section will describe the installation of the VPAI Kit.

### 1.0 VenomAire Wire Color Key

Wire Color	Description
Yellow	Key Run
Large Red Wire	Positive Battery
Large Black Wire	Negative Battery

## Remove the Factory Air Intake



1. Remove the factory intake tube leaving the stock airbox in place.
2. Carefully remove the Intake air temp (IAT) sensor from the intake tube. To remove, IAT may be rotated counterclockwise, 1/4 turn and pulled straight out.

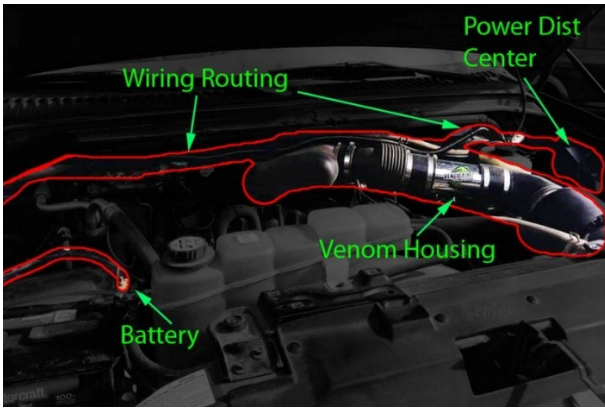
### 3.0 Install the Control Box

It is important to locate the Control Box in a cool environment, i.e., fender, firewall or location that is not directly above the exhaust manifolds or engine. For the JK and JL models we have provided a bracket.



1. Locate the Control Box on the driver's side above the Brake Proportioning Valve.
2. Insert the bracket behind the Proportioning Valve Body, to the inner fender and, the fender bolt as shown.
3. Face the Control box rearward or forward of the Control Box Mounting Bracket.

## 4.0 Main Wiring Harness Routing



1. Route the Main Wire Harness from the Control Box rearward to the Firewall, along the Firewall to the Battery.
2. Run Yellow Wire to the Fuse Tray.
3. Secure Harness with Zip Ties.

## 5.0 Install Add-a-Fuse (Yellow Wire)

You can test for power-on-fuse by cycling the key on and off and checking the fuses with a test light. When the key is on, choose a fuse that is on and off when the key is in the off position. You must use an Ignition-on fuse. **NOTE:** Position M14 may be used for JKs.

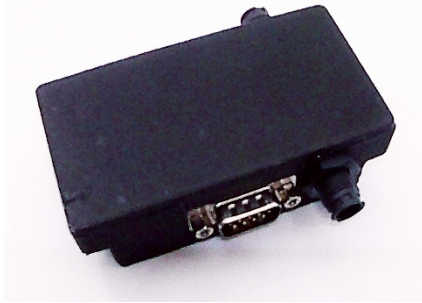


1. Locate a key-on, an empty fuse socket, or wire.
2. Install the Add-a-Fuse.



3. Route the Add-a-Fuse wire through fuse box and crimp the VenomAire Yellow Wire.
4. Cut a small V in the edge of the Fuse box to allow the wire to exit, to prevent the lid from damaging the wire.
5. Cut to length, crimp to the Control Box Yellow Relay Wire, then to Add-a-Fuse wire.

## 6.0 Install Black Box and OBD Cable



1. Locate the OBDII port underneath the drivers' side kick panel. Install the OBDII Cable into the DB9 serial port.
2. Install the 4 pin LED cable into the black box 4 pin socket.
3. Install the 7 Pin Control Pack wire into the 7 Pin socket in the Black Box.
4. Secure loose cables with zip ties and out of the way of pedals or feet that can catch.

## 7.0 Install Battery Connection

1. Attach the Large Red (Blue Fusible Link) Wire to the Positive Battery post.
2. Attach the Large Black Wire to the Negative Battery Post.

## 8.0 Install VenomAire Intake Turbine Housing



1. Install the vehicle's Intake Air Temp Sensor (IAT) in the VPAI Rubber Bung, located on the underside of the J-Tube Silicone Throttle Body Coupler. If it is difficult to insert, a tiny amount of grease can be used to insert it. Ensure that it is seated inside bung and the green IAT O-ring is seated inside the bung. It should be 90 degrees or perpendicular to the intake air flow.
2. Install the VPAI housing in the vehicle's air intake system.
3. Attach the IAT Wire Connector.
4. Route the Turbo Fan Motor Wire Harness clear of heat/belts and attach to the Control Box. Zip tie in place.



5. Ensure the housing is installed correctly according to directional indication marks.



6. The Motor Wire Rubber Gasket must be installed between the Housing Boss and the Wire Boss.



7. Marks are provided on the Fan Housing Boss and the Motor Wire Boss for proper alignment.

## 9.0 Install LED Indicator Light



1. Select a location for the LED indicator Housing. The LED housing has double-sided tape supplied for your convenience and can be mounted on the steering column, dash, or under the dash.
2. Clean mounting surface. Acetone may be used to thoroughly clean the surface.
3. The LED light, when properly installed, will illuminate when the VPAI is running correctly.

## 10.0 Final Installation Check

1. Ensure that all wires and wire loom are clear of pulleys, belts, and exhaust manifolds.
2. Ensure that there is no stress or pulling of any of the wires on the installed harness.
3. Zip-tie loose sections of wire to prevent damage.

## 11.0 Running the VenomAire Turbo Fan Intake

1. During the Boot up sequence, the VPAI checks for proper voltage and looks for correct idle position of the vehicle. This is done each time you start your vehicle.
2. Once the system is armed, while depressing the throttle position, both lights should glow equally. They should not illuminate during idle but be steady and smooth and increase in brightness during the depression of the throttle pedal. Some applications do flicker at idle. Occasionally the lights may illuminate at idle during warm-up.
3. The VPAI is self-tuning and will continually adjust to your driving habits.
4. It typically takes about two weeks for optimal tuning between the engine and VPAI.

## 12.0 Perform a Test Drive

1. The VPAI is self-tuning and requires no effort on your part to adjust. Simple driving will tune and adjust the VPAI and the vehicle's onboard computer will adjust.
2. There should be no noises coming from the VPAI. Verify no check engine lights have been triggered.
3. Perform a few wide-open throttle accelerations to allow the VPAI's computer to calibrate the Wide-Open Throttle Position.
4. The LED Indicator Light may be used to double-check the function of the VPAI. When the VPAI is running correctly, the LED light will illuminate once the throttle pedal is depressed and typically turn off when released.
5. The VPAI should never sound like it rattles or has a whining sound.

## 13.0 Maintenance and Troubleshooting

1. Ensure your vehicle has a clean OEM paper air filter. To achieve the best performance from the VPAI, it is strongly recommended to use only the OEM paper air filter.
2. It is the End User's responsibility to maintain and care for the intake system.
3. Any air leaks can cause engine damage and/or premature wear on the VPAI.
4. The charging system must be within OEM specifications for the proper operation of the VPAI. The VPAI typically draws 5-10 amps during normal driving and operation but may briefly draw as much as 50 amps at wide-open throttle.
5. The VPAI may be run day or night and will not damage your vehicle's battery or charging system.
6. The VPAI is designed with the highest quality brushless motors available. They require no maintenance and should last many years.
7. If you are suspect a problem or the VPAI is making unusual noise, please disconnect the wire harness from the battery and contact the manufacturer or installer. You may continue to drive your vehicle without removal. The fan is designed so that it will not interfere with the regular operation, of any vehicle, while it is not running or unplugged.

## 14.0 VenomAire Turbo Fan Intake Limited Warranty

**THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.**

**THE LIMITED WARRANTY CAN ALSO BE FOUND ONLINE AT [WWW.VENOMAIRE.COM/WARRANTY](http://WWW.VENOMAIRE.COM/WARRANTY) [AND/OR] IN THE DOCUMENTATION WE PROVIDE WITH THE PRODUCT.**

**WE WARRANT THAT DURING THE WARRANTY PERIOD, THE PRODUCT WILL BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP WE LIMIT THE DURATION AND REMEDIES OF ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO THE DURATION OF THIS EXPRESS LIMITED WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.**

**OUR RESPONSIBILITY FOR DEFECTIVE GOODS IS LIMITED TO REPAIR OR REPLACEMENT [OR REFUND] AS DESCRIBED BELOW IN THIS WARRANTY STATEMENT.**

**WHO MAY USE THIS WARRANTY?**

VenomAire, LLC located at address 13232 South 300 East, Draper, Utah 84020 ("we") extend this limited warranty only to the consumer who originally purchased the product ("you"). It does not extend to any subsequent owner or other transferee of the product.

**WHAT DOES THIS WARRANTY COVER?**

This limited warranty covers defects in materials and workmanship of the VenomAire Turbo Fan (the "product") for the Warranty Period as defined below.

**WHAT DOES THIS WARRANTY NOT COVER?**

This limited warranty does not cover any damage due to: (a) transportation; (b) storage; (c) improper use; (d) failure to follow the product instructions or to perform any preventive maintenance; (e) modifications; (f) unauthorized repair; (g) normal wear and tear; or (h) external causes such as accidents, abuse, or other actions or events beyond our reasonable control (e.g., acts of God, natural disasters).

**WHAT IS THE PERIOD OF COVERAGE?**

This limited warranty starts on the date of your purchase and lasts for one year (the "Warranty Period"). The Warranty Period is not extended if we repair or replace the product. We may change the availability of this limited warranty at our discretion, but any changes will not be retroactive.

**WHAT ARE YOUR REMEDIES UNDER THIS WARRANTY?**

With respect to any defective product during the Warranty Period, we will, in our sole discretion, either: (a) repair or replace such product (or the defective part) free of charge or (b) refund the purchase price of such product. We will also pay for shipping and handling fees to return the repaired or replacement product to you if we elect to repair or replace the defective product.

**HOW DO YOU OBTAIN WARRANTY SERVICE?**

To obtain warranty service, you must Email VenomAire, LLC at [support@venomaire.com](mailto:support@venomaire.com) during the Warranty Period to obtain a Return Merchandise Authorization ("RMA") number. No warranty service will be provided without a RMA number

Step 1: Request an RMA Number (*Return Merchandise Authorization*)

Step 2: All RMA request forms must be completed and returned to our office in order to obtain RMA #. Incomplete forms will not be issued an RMA #.

Step 3: You will receive an RMA # within 72 hours of your RMA request. With specific instructions on how to return merchandise

**LIMITATION OF LIABILITY**

**THE REMEDIES DESCRIBED ABOVE ARE YOUR SOLE AND EXCLUSIVE REMEDIES AND OUR ENTIRE LIABILITY FOR ANY BREACH OF THIS LIMITED WARRANTY. OUR LIABILITY SHALL UNDER NO CIRCUMSTANCES EXCEED THE ACTUAL AMOUNT PAID BY YOU FOR THE DEFECTIVE PRODUCT, NOR SHALL WE UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES OR LOSSES, WHETHER DIRECT OR INDIRECT.**

**SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.**